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FIG. 1A

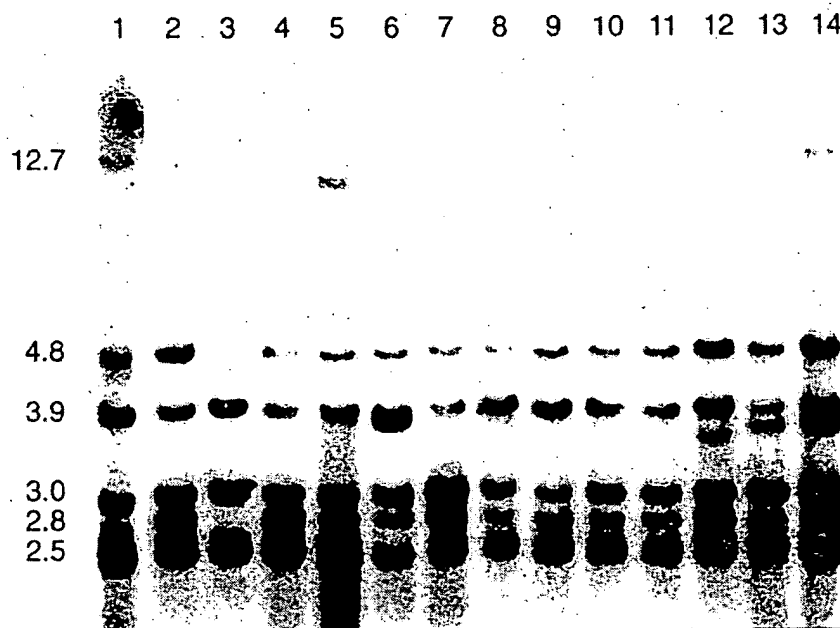


FIG. 1B

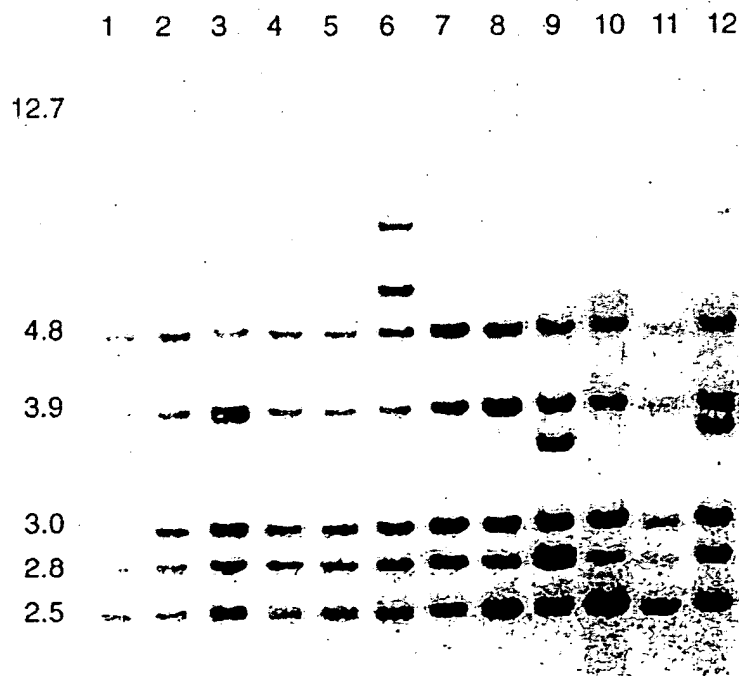


FIG. 2C

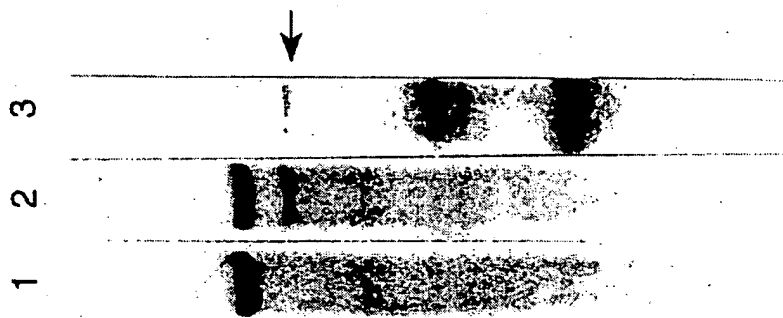


FIG. 2B

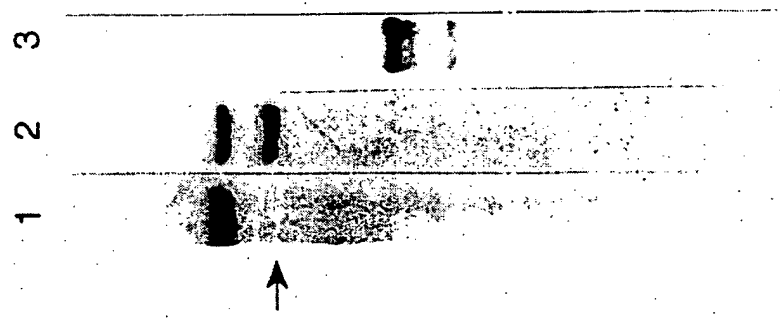


FIG. 2A

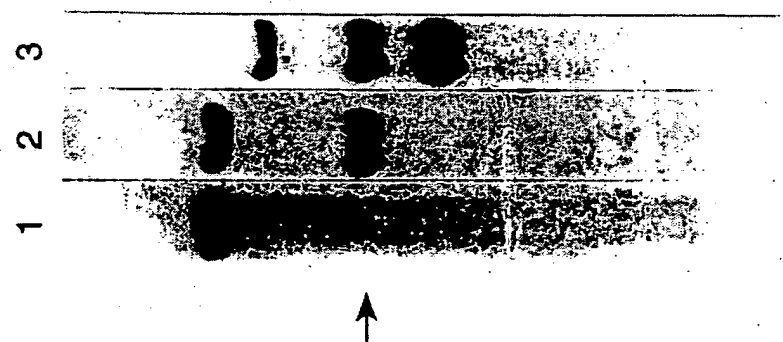


FIG. 3

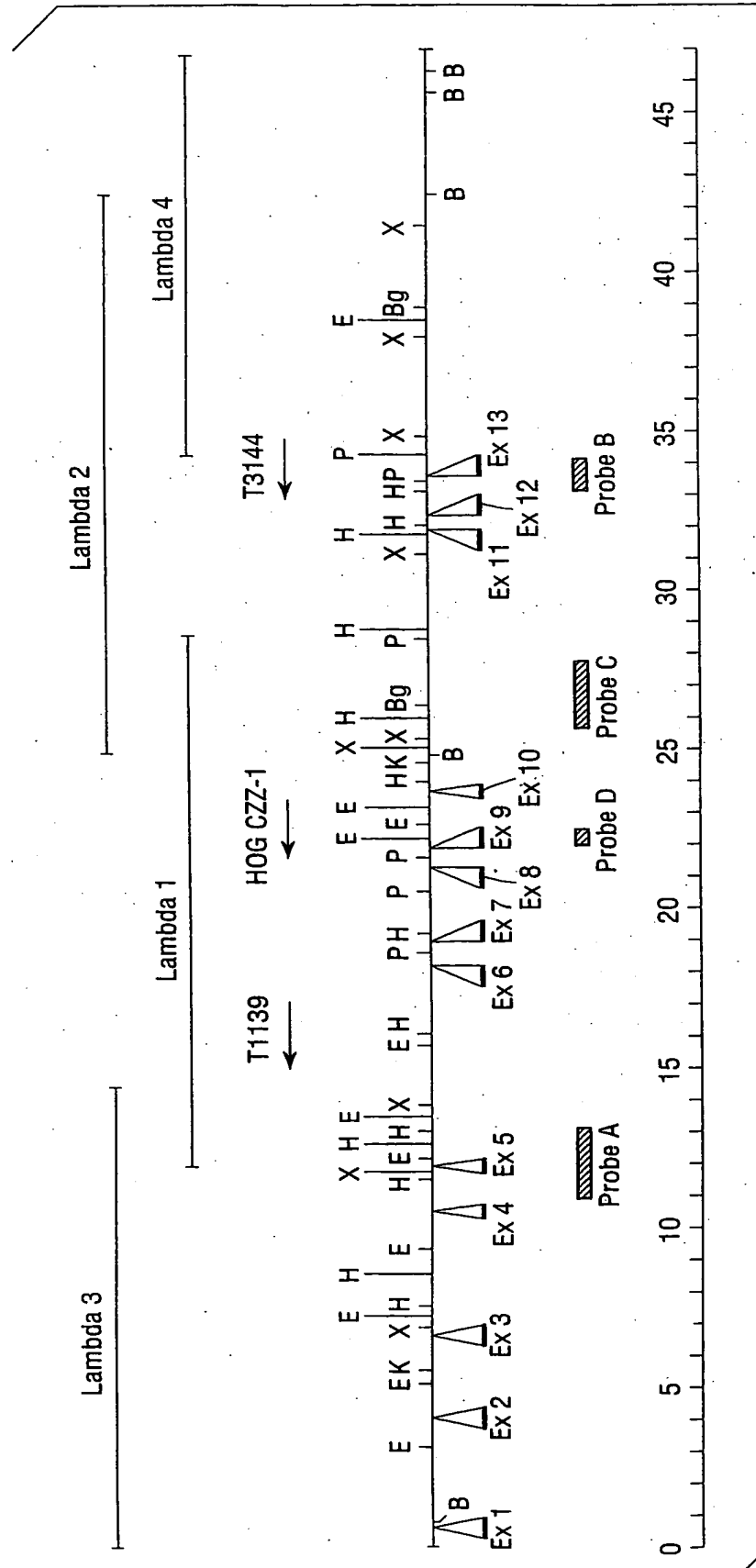


FIG. 4

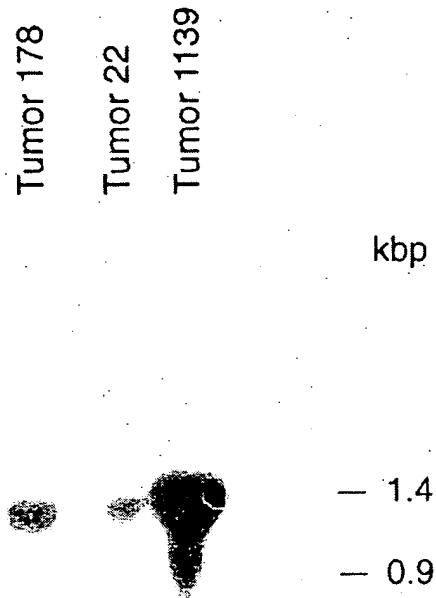


FIG. 5A

10 AAC AAGCGCTCCTTTTCCCCCGGCAAGATGGCGGAGTACGACCTGACTACTGCATCGCGCATTTTCTGGATCGGCACCTGGTCTTTCCGCTTCTTGAGTTT 30 50 70 90

110 CTCTCTGTGAAGAGATTATTAATGAAAAAGAAATTATTACAAGGAAAATTAGATCTTCTTAGTGATACCAATATGGTGGACTTTGCTATGGATGTTTACA 130 150 170 190

120 M V D F A M D V Y K

210 AAAACCTTTATTTCTGATGATATCCCTCTCATGCTTTTGAGAGAAAAAGAACCAACAGTTGTTGCGCAGCTGAAACAGCTCCAGGCAGAAAAACAGAACCAATTGT 230 250 270 290

220 N L Y S D D I P H A L R E K R T (T) V V A Q L K Q L Q A E T E P I V

310 GAAGATGTTTGAAGATCCAGAACTACAGAGGCGAGATGCAGTCAACAGGATGGCAGGATGTTTATTTGACTACCTGGCAGACACAAACATGGGTTTAGGCAA 330 350 370 390

320 K M F E D P E (A) T R Q M Q (S) T R D G R M L F D Y L A D K H G F R Q

410 GAGTACTTAGATACACTTACAGATACGCAAAATTCAGTATGAGTGTGGAATTACTCTGGAGCTGCAGAGTATCTTTACTTCTTTAGAGTTTGGTCC 430 450 470 490

420 E Y L D T L Y R Y A K F Q Y E C G (N) Y S G A A E Y L Y F F R V L V P

510 CAGCAACAGATAGAAATGCTTTAAGTTGCTCTGGGGGAAACTGGCCTCTGAAATCTTAATGCAGAAATTTGGATGCAGCCATGGAAAGACCTTACTCGATT 530 550 570 590

520 A (A) D R N A L S S L W G K L A S E I L M Q N W D A A M E D L T R L

610 AAAAGAAACCATAGACAATAATTCTGTGAGTTCTCCACTCCAGTCTCTTCAGCAGCGAACAATGGCTCATTTGCTCTCTATTTTGTCTTTTCAACCAT 630 650 670 690

620 K E T I D (N) N S V S S P L Q S L Q Q R T W L I H W S L F V F F N H

710 CCAAGGCCGTGATAACATTATTGATCTCTTCTTACCAACACAGTATCTTAATGCAATTCAGACAATGTCTCCACATATTCTACGCTATTGACTA 730 750 770 790

720 P K G R D N I I D L F L Y Q P Q Y L N A I Q T M C P H I L R Y L T T

FIG. 5B

810 830 850 870 890
CTGCCGTCATAACCAAGATGTGCGGAACGCCGGCAGGTGCTGGAAGATCTGGTGAAGTGAATCAACAGAGTCTTACACATATAAAGACCCCAAT
A V I **T** N K D V R K R Q V L K D L V K V I Q Q E S Y **T** Y K D P I
910 930 950 970 990
TACAGAAATTTGTTGAATGCCCTATATGTTAACTTTGATTTTGACGGGGCTCAGAAAAAGCTGAGAGAAATGTGAATCAGTCTGCTGTAATGACTTCTTCTCCTG
T E F V E C L Y V N F D F D G A Q K K L R E C E S V L V N D F F L
1010 1030 1050 1070 1090
GTAGCGTCTGAGGACTTCATTGAGAAATGCCCGTCTCTTCATATTTGAGACGTTTGTGCTATCCACCAGTGTATCAGCATTAATATGTTAGCAGATA
V A C L E D F I E N A R L F I F E T F C R I H Q C I S I N M L A D K
1110 1130 1150 1170 1190
AACTGAATATGACTCCAGAAGAAGCTGAAGATGGATTGTGAATTTGATTAGAAATGCGAGGTTGGATGCCCAAGATTGATTCTTAACTAGGTCATGTGGT
L N M **T** P E E A E R W I V N L I R N A R L D A K I D S K L G H V V
1210 1230 1250 1270 1290
AATGGCAACAATGCAGTCTCGCCCTACCAAGCAAGTGAATGAAAAGACCAAAAGCCCTTCTTTTAGAAGCCCAATGTTGGCCATGAATATTGAAAAGAAA
M G N N A V S P Y Q Q V I E K T K S L **S** F R S Q M L A M N I E K K
1310 1330 1350 1370 1390
CTTAATCAGAACAGTAGATCAGAGGCTCCCAACTGGCAACCCCAAGACTCTGGCTTCTATTAAAGGATTATAAAGAAAAGAAAAGGAATAAGTGAA
L N Q N **S** R S E A P N W A T Q D S G F Y
1410 1430 1450 1470 1490
AGACACAGTAGCCATTGTGTATAAAGGATGACATACATTTTGAAGCAATTAACATGTTTGCTACAAATTTTGGAGAATTTGAATAAAATTTGGCTATGA
TTAA 1504

FIG. 6

C. elegans
Drosophila
Xenopus
Chicken
Mouse
Human



FIG. 7A

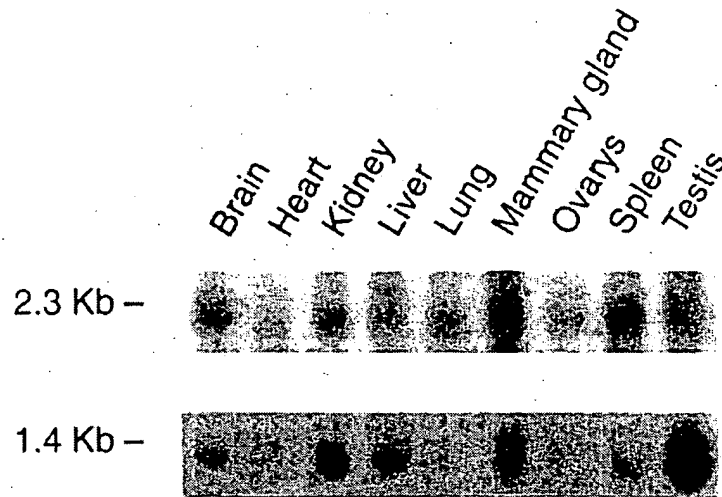


FIG. 7B

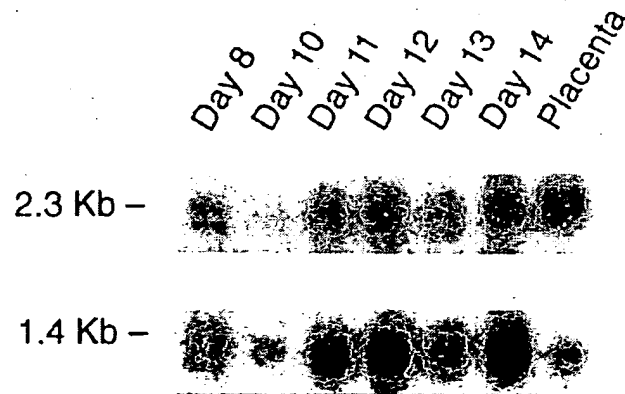


FIG. 8

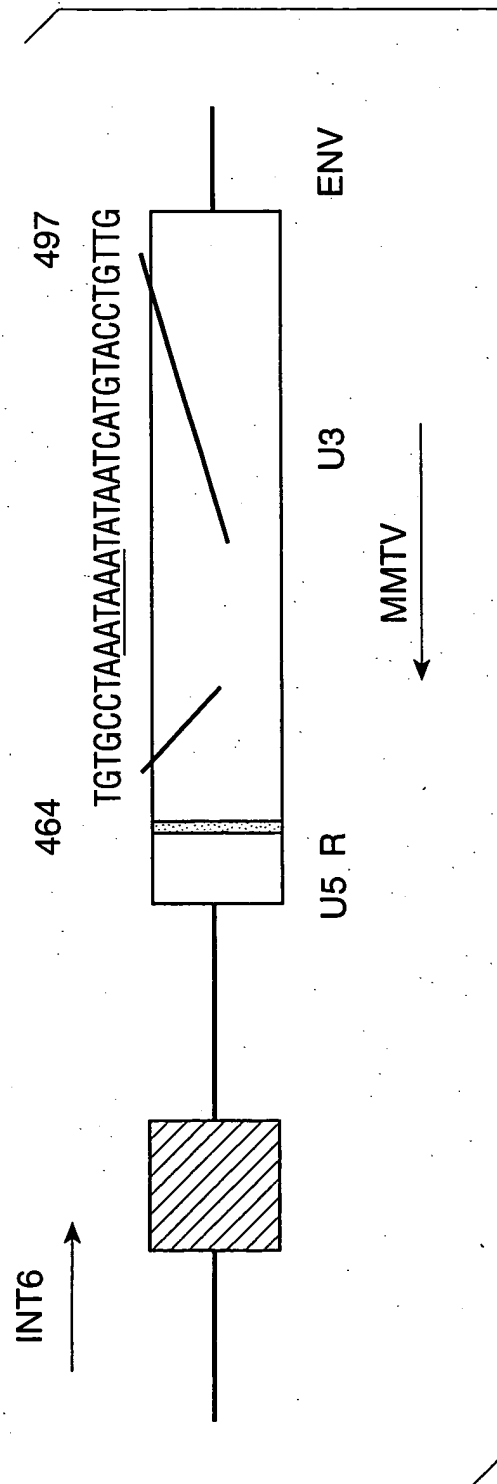


FIG. 9A

TUMOR 1139

350

GATGGCAGGATGTTATTGACTACCTGGCAGACAAACATGGGTTTAGGCAAGAGTACTTA

1 D G R M L F D Y L A D K H G F R Q E Y L

2

GATACACTCTACAGATACGCAAAATTCACAGTATGAGTGTGGAAATTACTCTGGAGCTGCA

1 D T L Y R Y A K F Q Y E C G N Y S G A A

2

498

GAGTATCTTTTACTTCTTTAGAGTTTGAattgaagatgtattgactgtcaatggcatatt

1 E Y L Y F F R V L N *

2

agaacctttaacagcactttcccatcatgcacaGTCGCCGAGTCGGCCGACCTGAGGGGCC

1 - - - - -

2 - - - - - L P Q S A D L R A

ACCGGGGTCTGCGGGGGACCCCTCTGGAAGGTAATGGATAAGTGACGAGCGGAGACGGGA

1 T G V C G G T L W K V M D K *

TGGCGAACAGACACAAACACACGAGAGACGAATGTTAGGACTGTTGCAAGTTTACTCAA

AATCAGCACTCTTTATATCATGTTTACATAAGCATTTACATAAGACTTGGATAGATTCC

AAAAGAACATAGGAGGTAGAACACTCAGAGCTTAGATCAAAACATTTGATACCAAAACCA

GGTCAGGAAACCACTTGTCCTCACATCCTTGTGTTTAAAGAACAGTTTGTAAACCATGAAATTA

TTTGAACTTGGGAACCGCAGCAATACCTTAATATGTATCATATAACAGTCAGAGGTATG

CCTTAATATGTTTTTATATATGTTCTTTGCCCCCTCTTCCCTTACTTTTAGGATTTATCTCC

AATGTTTTATCCCTGTGCCTAAATAAA

FIG. 9B

TUMOR 22

877

	GAGTCTTACACATATAAAGACC	CAATTACAGAAATTTGTTGAATGCC	TATGCTTA	ACTTT
1	E S Y T Y K D P I T E F V E C L Y V N F			
2	. . . . .	. . . . .	. . . . .	. . . . .
3	. . . . .	. . . . .	. . . . .	. . . . .

978

		GATTTGACGGGCTCAGAAAAAGCTGAGAGAAATGTGAATCATtaaaaaataaaagttctttt	
1	D F D G A Q K K L R E C E S L K I K F F		
2	. . . . .	. . . . .	. . . . .
3	. . . . .	. . . . .	. . . . .
	cagagcaagtctggaattcgatatgtaaaccaagcagtcagtgattatggagatacat		
1	Q S K S G I R Y V N Q A V S G F M E I H		
2	. . . . .	. . . . .	. . . . .
3	. . . . .	. . . . .	. . . . .

1 R A A V G R P E G H R G L R G D P L E G

2 3

AATGGATAAGTGACGAGCGGAGACGGGATGGCGAACAGACACAAACACACGAGAGACGAA

*
G
N

21

3

TGTTAGGACTGTTGCAAGTTTACTCAAAAAATCAGCACTCTTTTATATCATGTTTACAT
AAAGCATTTACATAAGACTTGGATAGATTCCAAAAAGAACATAGGAGGTTAGAACACTCAGA
GCTTAGATCAAAACATTTGATACCAACCCAGGTCAGGAAACCACTTGTCTCACATCCCTTG
TTTTAAGAACAGTTTGTAACCATGAAATTATTTGAACCTTGGGAACCGCAGCAATACCTT
AAATATGTATCATAAACAGTCAGAGGTAATGCCTTAATATGTTTTATAATAATGTTCTTTGC
CCCTCTCCCTTACTTTAGGATTTATCTCCAATGTTTTATCCCTGTGCCTAAAAATAAA

FIG. 10

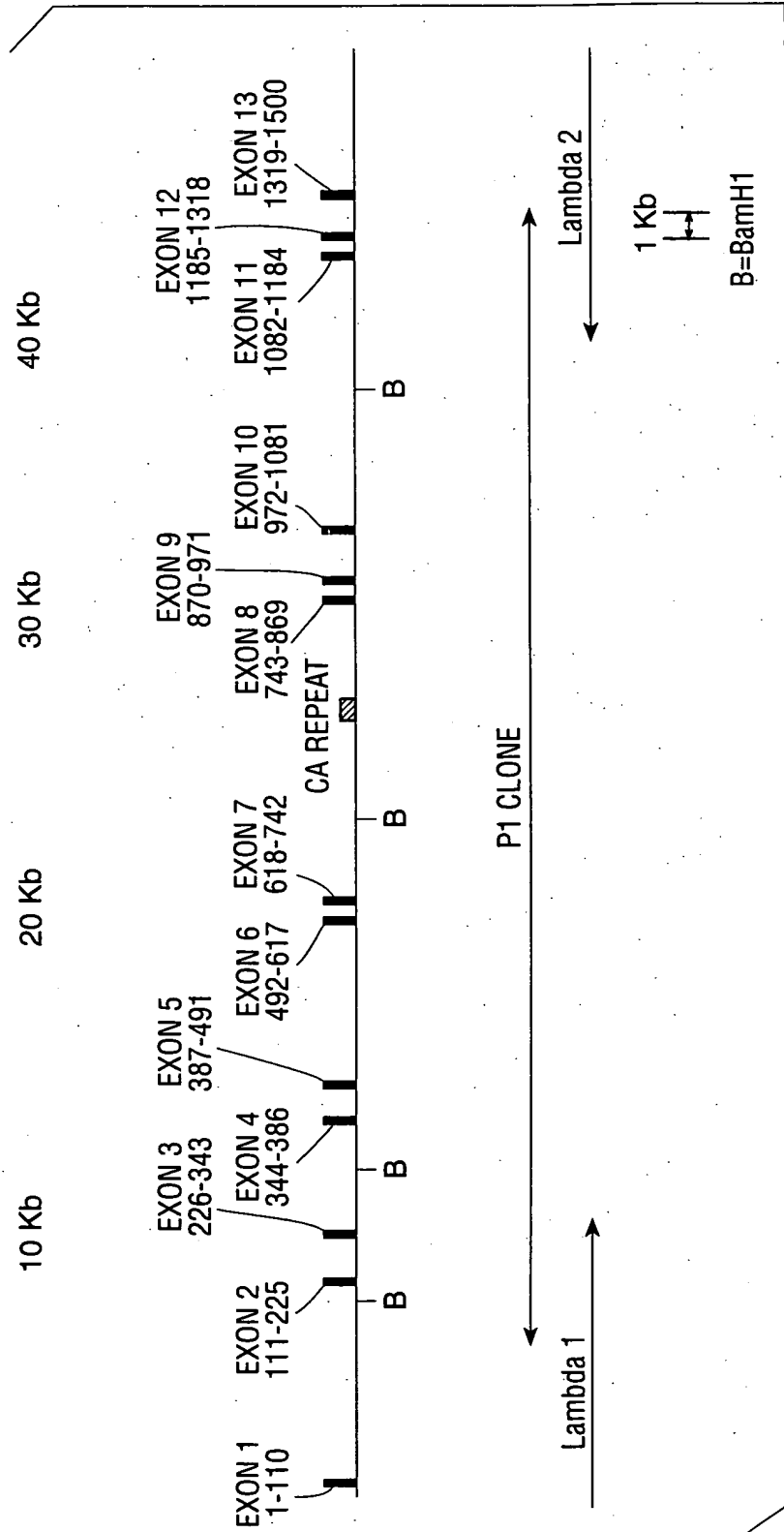


FIG. 11

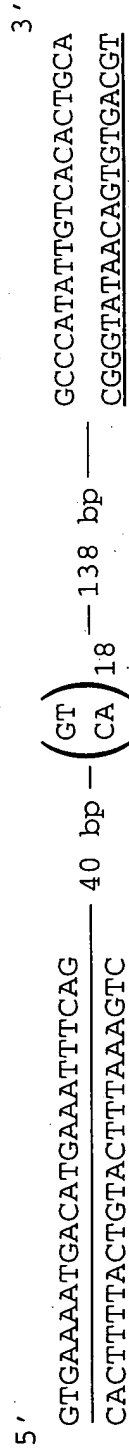


FIG. 12

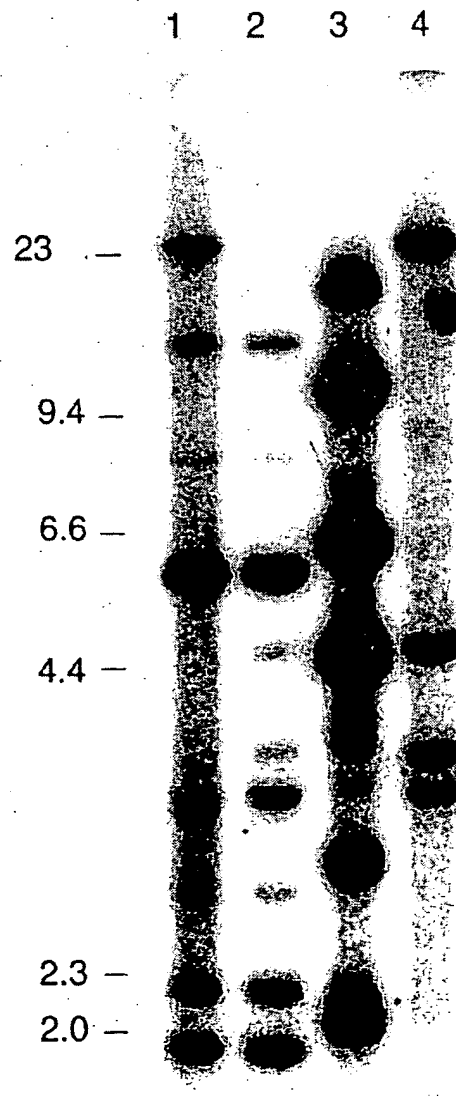


FIG. 13

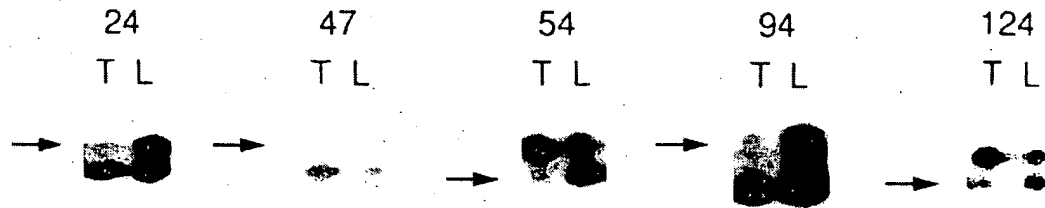


FIG. 14

5'			3'
<u>accaataaaagtttttagtgagcacag</u> <u>tggttattttcaaaatcactcgtgtc</u>	EXON 1	<u>gtgaggggggtctttgggcgc</u> <u>cactccccagaaacccgcg</u>	
<u>ttaatcagttttctttgggga</u> <u>aattagtc aaagaaacccct</u>	38bp EXON 2	<u>gtaagttttgtcattagaact</u> <u>cattcaaaacagtaatcttga</u>	
<u>tcttctgcatttttaattag</u> <u>agaagacgtaaaaattaatc</u>	EXON 3	<u>gtaaactcgtcttaattttg</u> <u>catttgagcagaattaaaac</u>	
<u>cttattttgtttctgtggcc</u> <u>gaataaaacaaagacaccg</u>	36bp EXON 4 11bp	<u>aaaaatattttaaagttgtcatg</u> <u>tttttataaaatttcaacagtac</u>	
<u>aattacaatgggggttttaa</u> <u>ttaatgttaccctcaaaattt</u>	42bp EXON 5 42bp	<u>taggattcccttggttcttc</u> <u>atcctaagggaaccaagaag</u>	
<u>ttcaagagtattcacaaat</u> <u>aagtctcataagtgttata</u>	EXON 6	<u>gtgagttcgtctttttcaca</u> <u>cactcaagcagaaaaagtgt</u>	
<u>agttttctttatctcacct</u> <u>tcaaagaaatagagtggga</u>	36bp EXON 8	<u>gtaaaactaaaatatatattg</u> <u>cattttgatttttatataac</u>	
<u>ccgttgacttatttttacag</u> <u>ggcaactgaataaaaatgtc</u>	EXON 9	<u>gtaagtgtgaatttttattt</u> <u>cattcacacttaaaaaataa</u>	
<u>ttgttgatattttgtacatag</u> <u>aacaacataaacatgtatct</u>	EXON 10	<u>gtaagaacaccgtgatttgat</u> <u>cattcttgtggcactaaacta</u>	
<u>aaaactaagtttttagggcc</u> <u>ttttgattcaaaaatccggg</u>	35bp EXON 11	<u>gtgagtattatgttagctat</u> <u>cactcataatacaatcgata</u>	
<u>ttccctgtgtttccttttag</u> <u>aagggaacacaaaggaaaatc</u>	EXON 12	<u>gtaagaccacacatcttctat</u> <u>cattctggtgtgtagaagata</u>	
<u>gattttctttttgcatattttag</u> <u>ctaaagaaaaacgtataaaatc</u>	EXON 13	<u>tcttgctgtcagttttcttg</u> <u>agaacgacagtcaaaagaac</u>	

FIG. 15

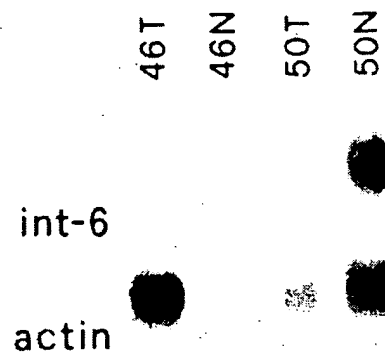


FIG. 16

